

CLAIM SUMMARY DOCUMENT:

1. (Previously amended) An isolated gene encoding a protein having activity to synthesize aurones ~~by preferentially~~ using chalcones as substrates, wherein said gene is obtained from *Scrophulariales*.

Claims 2-4 (Currently canceled)

5. (Previously amended) An isolated gene as set forth in claim 1, which encodes an amino acid sequence having a homology of at least 55% relative to the amino acid sequence described in SEQ ID NO:2, and encodes a protein having activity to synthesize aurones ~~by preferentially~~ using chalcones as substrates.

6. (Previously amended) A vector comprising a gene as set forth in claim 1.

7. (Previously amended) A host cell transformed by a vector as set forth in claim 6.

8. (Previously amended) A host cell as set forth in claim 7, wherein said host cell is a microorganism or animal cell.

9. (Previously amended) A host cell as set forth in claim 7, wherein said host cell is a plant cell.

Claims 10-17 (Previously canceled)

18. (Previously added) An isolated nucleic acid encoding a protein having activity to synthesize aurones ~~by preferentially~~ using chalcones as substrates, wherein said nucleic acid is obtained from *Scrophulariales*.

Claims 19-21 (Currently canceled)

22. (Previously added) An isolated nucleic acid as set forth in claim 18, which encodes an amino acid sequence having a homology of at least 55% relative to the amino acid sequence described in SEQ ID NO:2, and encodes a protein having activity to synthesize aurones ~~by preferentially~~ using chalcones as substrates.

23. (Previously added) A vector comprising a nucleic acid as set forth in claim 18.

24. (Previously added) A host cell transformed by a vector as set forth in claim 23.

25. (Previously added) A host cell as set forth in claim 24, wherein said host cell is a microorganism or animal cell.

26. (Previously added) A host cell as set forth in claim 24, wherein said host cell is a plant cell.

27. (New) An isolated nucleic acid obtained from *Antirrhinum majus*, encoding a protein having an activity to synthesize aurones using chalcones as substrates.

28. (New) A vector comprising a nucleic acid as set forth in claim 27.

29. (New) A host cell transformed with a vector as set forth in claim 28.

30. (New) A host cell according to claim 29, wherein said host cell is a microorganism, an animal cell or a plant cell.

31. (New) An isolated nucleic acid encoding an amino acid sequence as shown in SEQ ID NO: 2.

32. (New) A vector comprising a nucleic acid as set forth in claim 31.

33. (New) A host cell transformed with a vector as set forth in claim 32.
34. (New) A host cell according to claim 33, wherein said host cell is a microorganism, an animal cell or a plant cell.
35. (New) An isolated gene encoding a protein having activity to synthesize aurones using chalcones as substrates, wherein said protein has the amino acid sequence of SEQ ID NO: 2.
36. (New) An isolated nucleic acid sequence having the nucleotide sequence of SEQ ID NO:1.
37. (New) An isolated nucleic acid according to claim 27, wherein said encoded protein includes at least one amino acid sequence of SEQ ID NOs: 3, 4, 5, 6 and 7.
38. (New) An isolated nucleic acid as set forth in claim 22, which encodes an amino acid sequence having a sequence identity of at least 70% relative to the amino acid sequence described in SEQ ID NO:2.

39. (New) An isolated nucleic acid as set forth in claim 38, wherein said encoded protein includes at least one amino acid sequence selected from the group consisting of SEQ ID NOs:3, 4, 5, 6 and 7.

40. (New) An isolated nucleic acid as set forth in claim 38, which encodes an amino acid sequence having a sequence identity of at least 80% relative to the amino acid sequence described in SEQ ID NO:2.

41. (New) An isolated nucleic acid as set forth in claim 40, wherein said encoded protein includes at least one amino acid sequence selected from the group consisting of SEQ ID NO:3, 4, 5, 6 and 7.

42. (New) An isolated nucleic acid as set forth in claim 40, which encodes an amino acid sequence having a sequence identity of at least 90% relative to the amino acid sequence described in SEQ ID NO:2.

43. (New) An isolated nucleic acid as set forth in claim 42, wherein said encoded protein includes at least one amino acid sequence selected from the group consisting of SEQ ID NO:3, 4, 5, 6 and 7.